This listing of claims will replace all prior versions, and listings, of which in the applications:

Listing of Claims:

1-17. (Canceled)

18. (New) A method for manufacturing natural intestine sausages, comprising the steps of:

fitting a natural intestine casing over a stuffing tube having a distal end in a state in which the natural intestine casing is divided into a shirred portion and a straight portion;

discharging a material from the distal end of the stuffing tube into the natural intestine casing;

blowing out air from an air outlet of an air blowing means to an intestine pushing member so as to move the intestine pushing member toward an intestine receiving member for receiving the shirred portion over the stuffing tube so that the shirred portion advances toward the intestine receiving member, wherein the intestine pushing member is disposed between the air blowing means and the intestine receiving member and includes a hollow member having an intestine pushing surface for pushing the shirred portion, an air receiving surface disposed on an opposite side of the distal end of the stuffing tube with respect to the intestine pushing surface and receiving the air blown from the air outlet, and a hole portion formed between the intestine receiving surface and the air receiving surface to engage the stuffing tube;

pinching the shirred portion by and between the intestine pushing surface of the intestine pushing member and the intestine receiving surface of the intestine

receiving member, and moving the intestine pushing member up to a position where the intestine pushing surface of the intestine pushing member faces the intestine receiving surface of the intestine receiving member at a predetermined interval;

detecting the intestine pushing member when it faces the intestine receiving member;

transporting, while constricting, the natural intestine casing stuffed with the material, by transporting means having a pair of wrapping connectors with constricting members fixed thereto at predetermined intervals;

pulling and moving the natural intestine casing over the stuffing tube by the transporting for a predetermined time after the detection, wherein the distal end of the stuffing tube projects from the intestine receiving member up to a position exceeding a common tangential line of a pair of locus circle depicted by the pair of constricting members; and

stopping the discharging of the material into the natural intestine casing after the lapse of a predetermined time.

19. (New) The method for manufacturing natural intestine sausages according to claim 18, wherein the air ~~is blown out intermittently, at a first stage, so as to~~ move the intestine pushing member toward the position where the intestine pushing surface faces the intestine receiving surface at the predetermined interval, and at a second ~~stage, before the intestine pushing member reaches the~~ position, the air is blown out continuously to further move the intestine pushing member toward the position.

20. (New) A method for manufacturing natural intestine sausages, comprising the steps of:

fitting a natural intestine casing over a stuffing tube having a distal end, wherein the natural intestine casing is in a shirred state and has front and rear end portions;

discharging a material from the distal end of the stuffing tube into the natural intestine casing;

blowing out air from an air outlet of an air blowing means to an intestine pushing member so as to move the intestine pushing member toward the distal end of the stuffing tube over the stuffing tube so that the rear end portion of the natural intestine casing advances toward the distal end, wherein the intestine pushing member is disposed on the distal end side with respect to the air blowing means and includes a hollow member having an intestine pushing surface for pushing the rear end portion of the natural intestine casing, an air receiving surface disposed on an opposite side of the distal end of the stuffing tube with respect to the intestine pushing surface and receiving the air blown from the air outlet, and a hole portion formed between the intestine receiving surface and the air receiving surface to engage the stuffing tube;

detecting the intestine pushing member moving toward the distal end of the stuffing tube when the intestine pushing member reaches a detective position away from the distal end of the stuffing tube in a direction of the air blowing means by a predetermined distance in a longitudinal direction of the stuffing tube; and

stopping the discharging of the material into the natural intestine casing after the detection of the intestine pushing member.

21. (New) The method for manufacturing natural intestine sausages according to claim 20, wherein the air is blown out intermittently, at a first stage, so as to move the intestine pushing member toward the detective position, and at a second stage, before the intestine pushing member reaches the detective position, the air is blown out continuously to further move the intestine pushing member toward the detective position.

22. (New) An apparatus for manufacturing natural intestine sausages, comprising:

a stuffing tube having a distal end and adapted to stuff a material into a natural intestine casing having a rear end portion;

a material supplying means for supplying the material into the stuffing tube;

a transporting means disposed forwardly of the distal end of the stuffing tube and having a pair of wrapping connectors to transport the natural intestine casing stuffed with the material, in a direction away from the distal end;

an intestine pushing member including a hollow ~~member having an intestine pushing surface for pushing the~~ rear end portion of the natural intestine casing over the stuffing tube, an air receiving surface disposed on an opposite side of the distal end of the stuffing tube with ~~respect to the intestine pushing surface, and a hole~~ portion formed between the intestine pushing surface and the air receiving surface to engage the stuffing tube;

an intestine receiving member including a hole portion through which the distal end of the stuffing tube is passed so that the distal end is located in such a manner as to project on a transporting-means side and an intestine receiving surface for receiving the natural intestine casing being pushed by the intestine pushing member;

an intestine-pushing-member driving means having an air blowing means with an air outlet disposed on an opposite side of the intestine receiving member with respect to the intestine pushing member, and blowing out air from the air outlet toward the air receiving surface of the intestine pushing member to move the intestine pushing member toward the intestine receiving member over the stuffing tube so that a distance between the intestine pushing surface and the intestine receiving surface is reduced;

a detecting means disposed at a detective position for detecting the intestine pushing member when the intestine pushing surface faces the intestine receiving surface at a predetermined interval and generating a detection signal; and

a controlling means for stopping the operation of the material supplying means in response to the detection signal.

23. (New) The apparatus for manufacturing natural intestine sausages according to claim 22, wherein the detecting means is arranged such that the detecting means detects the intestine pushing member having the intestine pushing surface facing the intestine receiving surface at the predetermined interval.

24. (New) The apparatus for manufacturing natural intestine sausages according to claim 22, which further comprises a second detecting means which is disposed between the detecting means and the air blowing means for detecting the intestine pushing member moving toward the detective position and transmits a signal for instructing a change of the manner of blowing out the air from the air outlet, to an air-blowing-mode changing means provided in the intestine-pushing-member driving means.

25. (New) An apparatus for manufacturing natural intestine sausages, comprising:

a stuffing tube having a distal end and adapted to stuff a material into a natural intestine casing having a rear end portion;

a material supplying means for supplying the material into the stuffing tube;

a transporting means disposed forwardly of the distal end of the stuffing tube and adapted to transport the natural intestine casing stuffed with the material, in a direction away from the distal end;

an intestine pushing member including a hollow member having an intestine pushing surface for pushing the rear end portion of the natural intestine casing over the stuffing tube, an air receiving surface disposed on an opposite side of the distal end of the stuffing tube with respect to the intestine pushing surface, and a hole portion formed between the intestine pushing surface and the air receiving surface to engage the stuffing tube;

an intestine receiving member including a hole portion through which the distal end of the stuffing tube is passed so that the distal end is located in such a

manner as to project on a transporting-means side and an intestine receiving surface for receiving the natural intestine casing being pushed by the intestine pushing member;

an intestine-pushing-member driving means having an air blowing means with an air outlet disposed on an opposite side of the intestine receiving member with respect to the intestine pushing member, and blowing out air from the air outlet toward the air receiving surface of the intestine pushing member to move the intestine pushing member toward the intestine receiving member over the stuffing tube so that a distance between the intestine pushing surface and the intestine receiving surface is reduced;

a detecting means disposed at a detective position for detecting the intestine pushing member when the intestine pushing surface faces the intestine receiving surface at a predetermined interval and generating a detection signal; and

a controlling means for stopping the operation of the material supplying means in response to the detection signal,

wherein the transporting means has a pair of wrapping connectors to which constricting members for ~~constricting the natural intestine casing stuffed with the~~ material, are fixed at predetermined intervals, and each of the pair of wrapping connectors has a shaft, a locus circle depicted by a tip of each of the constricting members which respectively move about the shaft, and a common tangential line which is tangential to the pair of locus circles of the pair of wrapping connectors, and wherein the stuffing

tube is disposed such that the distal end thereof is located between the tangential line and the shaft.

26. (New) The apparatus for manufacturing natural intestine sausages according to claim 22, wherein the controlling means has a means for changing a transporting speed of the transporting means in response to the detection signal.

27. (New) The apparatus for manufacturing natural intestine sausages according to claim 22, which further comprises an intestine-receiving-member attaching member having an end face provided with a hole portion in which the intestine receiving member is attached, wherein the intestine receiving member is disposed in the intestine-receiving-member attaching member such that the intestine receiving surface is positioned flush with the end face or in such a manner as to project toward a side opposite to the transporting means side from the end face.

28. (New) The apparatus for manufacturing natural intestine sausages according to claim 22, which further comprises an intestine-receiving-member attaching member having an end face provided with a hole portion in which the intestine receiving member is attached, wherein the intestine receiving member is disposed in the intestine-receiving-member attaching member such that the intestine receiving surface is positioned inside the hole portion.

29. (New) The apparatus for manufacturing natural intestine sausages according to claim 22 or 24, wherein each of the detecting means and the second detecting means has a proximity sensor for detecting the intestine pushing member.

30. (New) The apparatus for manufacturing natural intestine sausages according to claim 22, wherein the hollow member of the intestine pushing member is formed of a resin, in which a metallic annular member fits, and wherein the detecting means has a proximity sensor.

31. (New) The apparatus for manufacturing natural intestine sausages according to claim 25, wherein the hollow member of the intestine pushing member is formed of a resin, in which a metallic annular member fits, and wherein the detecting means has a proximity sensor.

32. (New) An apparatus for manufacturing natural intestine sausages, comprising:

a stuffing tube having a distal end and adapted to stuff a material into a natural intestine casing having a rear end portion;

a material supplying means for supplying the material into the stuffing tube;

a transporting means disposed forwardly of the distal end of the stuffing tube and having a pair of wrapping connectors to transport the natural intestine casing stuffed with the material, in a direction away from the distal end;

an intestine pushing member including a hollow member formed of a resin, in which a metallic annular ~~member fits, the hollow member having an intestine pushing~~ surface for pushing the rear end portion of the natural intestine casing over the stuffing tube, an air receiving surface disposed <u>on</u> an opposite side of the distal end of ~~the stuffing tube with respect to the intestine pushing~~ surface, and a hole portion formed between the intestine

pushing surface and the air receiving surface to engage the stuffing tube;

an intestine receiving member including a hole portion through which the distal end of the stuffing tube is passed so that the distal end is located in such a manner as to project on a transporting-means side and an intestine receiving surface for receiving the natural intestine casing being pushed by the intestine pushing member;

an intestine-pushing-member driving means having an air blowing means with an air outlet disposed on the opposite side of the intestine receiving member with respect to the intestine pushing member, and blowing out air from the air outlet toward the air receiving surface of the intestine pushing member to move the intestine pushing member toward the intestine receiving member over the stuffing tube so that a distance between the intestine pushing surface and the intestine receiving surface is reduced;

a detecting means having a proximity sensor and disposed at a detective position for detecting the metallic annular member of the intestine pushing member when the intestine pushing surface faces the intestine receiving surface at a predetermined interval and generating a detection signal; and

a controlling means for stopping the operation of the material supplying means in response to the detection signal.

33. (New) An apparatus for manufacturing natural intestine sausages, comprising:

a stuffing tube having a distal end and adapted to stuff a material into a natural intestine casing having a rear end portion;

a material supplying means for supplying the material into the stuffing tube;

an intestine pushing member including a hollow member having an intestine pushing surface for pushing the rear end portion of the natural intestine casing over the stuffing tube, an air receiving surface disposed on an opposite side of the distal end of the stuffing tube with respect to the intestine pushing surface, and a hole portion formed between the intestine pushing surface and the air receiving surface to engage the stuffing tube;

an intestine-pushing-member driving means having an air blowing means with an air outlet disposed on an opposite side of the distal end of the stuffing tube with respect to the intestine pushing member, and blowing out air from the air outlet toward the air receiving surface of the intestine pushing member to move the intestine pushing member toward the distal end of the stuffing tube over the stuffing tube;

a detecting means disposed at a detective position away from the distal end of the stuffing tube in a direction of the air blowing means by a predetermined distance in a longitudinal direction of the stuffing tube and detecting the intestine pushing member moving toward the distal end of the stuffing tube and generating a detection signal; and

a controlling means for stopping the operation of the material supplying means in response to the detection signal.

34. (New) The apparatus for manufacturing natural intestine sausages according to claim 33, wherein the hollow member of the intestine pushing member is formed of a resin, in which a metallic annular member fits, and wherein the detecting means has a proximity sensor for detecting the metallic annular member.